From: Fuentes, Rene
To: "Mullen, Tom"

Subject: RE: DOCKET NO. SDWA-10-2013-0080 / Groundwater Monitoring Well Installation Activities - Monday, August

5, 2013 Update

**Date:** Tuesday, August 06, 2013 9:44:00 AM

That is too bad that the pump went since you had planned ahead to bring the jacks. Hope they can get pump fixed soon.

Thanks for the update,

Rene

From: Mullen, Tom [mailto:Tom.Mullen@arcadis-us.com]

Sent: Tuesday, August 06, 2013 7:42 AM

To: Fuentes, Rene

Cc: Winiecki, Eric; Freeman, Kevin; Sebesta, Lisa

Subject: DOCKET NO. SDWA-10-2013-0080 / Groundwater Monitoring Well Installation Activities -

Monday, August 5, 2013 Update

Rene,

For Monday, August 5, Cascade circulated air downhole (casing was at 228 ft) and water was observed. Cascade then drilled to a total depth of 248 feet and tripped out the rods. Water levels were monitored from 9:35 to 10:25 and continued to rise from 242.1 to 239.2 feet bgs. Given the slow recharge and the observation of water with casing at 228 feet, the well screen was set from 225 to 245 feet. Centralizers were placed at 245, 225, 175, 125, 75 and 25 feet. Prior to installation of the filter pack

Cascade set in place hydraulic jacks to extract the casing. Cascade installed the 10-20 sand filter pack to a depth of 220 feet. Upon placing the bentonite chip seal and extracting the drill casing, the hydraulic pump to the jacks failed with 200 feet of casing still on the string. Cascade spent the remaining part of the afternoon dismantling the hydraulic pump from the rig. The pump is being taken to a hydraulic shop in Pasco Tuesday morning. Will know later this morning how soon the pump can be repaired and well installation activities resume.

Please let me know if you have any questions.

## Tom

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